

## EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	1	"20020063669"	US-PGPUB; USPAT	OR	ON	2009/02/25 11:09
L2	1	10/727645	US-PGPUB; USPAT	OR	ON	2009/02/25 11:13
L3	6	"6181310"	US-PGPUB; USPAT	OR	ON	2009/02/25 12:10
L4	26	("3909114"   "4380372"   "4529271"   "5251048"   "5384067"   "5420604"   "5437811"   "5699074"   "5748277"   "6169530"   "6181310"   "6313817").PN. OR ("6507331").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/25 14:07

## EAST Search History

L9	307	("20010003487"   "20010034075"   "20010043171"   "20010046081"   "20010051014"   "20020000959"   "20020005827"   "20020012159"   "20020015215"   "20020024711"   "20020036304"   "20020050882"   "20020051281"   "20020054424"   "20020075226"   "20020075555"   "20020093722"   "20020097133"   "20020126364"   "20020179421"   "20020186108"   "20030004272"   "20030043157"   "20030053227"   "20030072070"   "20030122773"   "20030137215"   "20030137521"   "20030189536"   "20030202264"   "20030202265"   "20030202266"   "20040008396"   "20040022044"   "20040027701"   "20040051929"   "20040058532"   "20040080807"   "20040145049"   "20040147056"   "20040160143"   "20040174583"   "20040179281"   "20040212026"   "20040217378"   "20040217919"   "20040218251"   "20040218334"   "20040218341"   "20040223204"   "20040227493"   "20040240032"   "20040240138"   "20040245588"   "20040263944"   "20050001828"   "20050012577"   "20050038950"   "20050057442"   "20050068583"   "20050069209"   "20050116924"   "20050206991"   "20050286113"   "20050286114"   "20060044246"   "20060044298"   "20060044928"   "20060056000"   "20060057754"   "20060066542"   "20060066559"   "20060066560"   "20060066561"   "20060066594"   "20060066597"   "20060066598"   "20060066601"   "20060066937"   "20060067648"   "20060067653"   "20060077127"   "20060077505"   "20060077520"   "20060103613"   "3982239"   "4403248"   "4441791"   "4459182"   "4482213"   "4500171"   "4519676"   "4566935"   "4571603"   "4596992"   "4615595").PN. OR ("4662746"   "4681403"   "4709995"   "4710732"   "4856863"   "4859060"   "4954789"   "4956619"   "4982184"   "5018256"   "5028939"   "5037173"   "5055833"   "5061049"   "5078479"   "5079544"   "5083857"   "5096279"   "5099353"   "5124834"   "5142405"   "5142414"   "5162787"   "5168406"   "5170156"   "5172262"   "5179274"   "5192395"   "5192946"   "5206629"   "5212582"   "5214419"   "5214420"   "5216537"   "5226099"   "5227900"   "5231528"   "5233385"   "5233456"   "5233459"   "5254980"   "5272473"   "5273258"   "5282277"   "5287228"   "5287229"   "5287230"   "5287231"   "5287232"   "5287233"   "5287234"   "5287235"   "5287236"   "5287237"   "5287238"   "5287239"   "5287240"   "5287241"   "5287242"   "5287243"   "5287244"   "5287245"   "5287246"   "5287247"   "5287248"   "5287249"   "5287250"   "5287251"   "5287252"   "5287253"   "5287254"   "5287255"   "5287256"   "5287257"   "5287258"   "5287259"   "5287260"   "5287261"   "5287262"   "5287263"   "5287264"   "5287265"   "5287266"   "5287267"   "5287268"   "5287269"   "5287270"   "5287271"   "5287272"   "5287273"   "5287274"   "5287275"   "5287276"   "5287277"   "5287278"   "5287279"   "5287280"   "5287281"   "5287282"   "5287283"   "5287284"   "5287285"   "5287286"   "5287287"   "5287288"   "5287289"   "5287290"   "5287291"   "5287292"   "5287293"   "5287294"   "5287295"   "5287296"   "5287297"   "5287298"   "5287299"   "5287300"   "5287301"   "5287302"   "5287303"   "5287304"   "5287305"   "5287306"   "5287307"   "5287308"   "5287309"   "5287310"   "5287311"   "5287312"   "5287313"   "5287314"   "5287315"   "5287316"   "5287317"   "5287318"   "5287319"   "5287320"   "5287321"   "5287322"   "5287323"   "5287324"   "5287325"   "5287326"   "5287327"   "5287328"   "5287329"   "5287330"   "5287331"   "5287332"   "5287333"   "5287334"   "5287335"   "5287336"   "5287337"   "5287338"   "5287339"   "5287340"   "5287341"   "5287342"   "5287343"   "5287344"   "5287345"   "5287346"   "5287347"   "5287348"   "5287349"   "5287350"   "5287351"   "5287352"   "5287353"   "5287354"   "5287355"   "5287356"   "5287357"   "5287358"   "5287359"   "5287360"   "5287361"   "5287362"   "5287363"   "5287364"   "5287365"   "5287366"   "5287367"   "5287368"   "5287369"   "5287370"   "5287371"   "5287372"   "5287373"   "5287374"   "5287375"   "5287376"   "5287377"   "5287378"   "5287379"   "5287380"   "5287381"   "5287382"   "5287383"   "5287384"   "5287385"   "5287386"   "5287387"   "5287388"   "5287389"   "5287390"   "5287391"   "5287392"   "5287393"   "5287394"   "5287395"   "5287396"   "5287397"   "5287398"   "5287399"   "5287400"   "5287401
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## EAST Search History

L10	10	("4239345"   "5296953"   "5488499"   "5594464"   "5684503").PN. OR ("6181310").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/25 14:10
L11	38	("3837730"   "4239345"   "4333708"   "4411496"   "4505548"   "4529271"   "4566758"   "4582396"   "4601542"   "4601543"   "4601544"   "4717243"   "4770500"   "5095376"   "5189535"   "5287205"   "5488499").PN. OR ("5594464").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/25 14:10
L12	6	("20020084961"   "5594464"   "5900852"   "6252571"   "6452573"   "6784968").PN. OR ("7173587").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/25 14:10
L13	46	((YOSHINORI) near2 (OGAWA)).INV.	US-PGPUB; USPAT	OR	ON	2009/02/25 14:10

# EAST Search History

L18	307	("20010003487"   "20010034075"   "20010043171"   "20010046081"   "20010051014"   "20020000959"   "20020005827"   "20020012159"   "20020015215"   "20020024711"   "20020036304"   "20020050882"   "20020051281"   "20020054424"   "20020075226"   "20020075555"   "20020093722"   "20020097133"   "20020126364"   "20020179421"   "20020186108"   "20030004272"   "20030043157"   "20030053227"   "20030072070"   "20030122773"   "20030137215"   "20030137521"   "20030189536"   "20030202264"   "20030202265"   "20030202266"   "20040008396"   "20040022044"   "20040027701"   "20040051929"   "20040058532"   "20040080807"   "20040145049"   "20040147056"   "20040160143"   "20040174583"   "20040179281"   "20040212026"   "20040217378"   "20040217919"   "20040218251"   "20040218334"   "20040218341"   "20040223204"   "20040227493"   "20040240032"   "20040240138"   "20040245588"   "20040263944"   "20050001828"   "20050012577"   "20050038950"   "20050057442"   "20050068583"   "20050069209"   "20050116924"   "20050206991"   "20050286113"   "20050286114"   "20060044246"   "20060044298"   "20060044928"   "20060056000"   "20060057754"   "20060066542"   "20060066559"   "20060066560"   "20060066561"   "20060066594"   "20060066597"   "20060066598"   "20060066601"   "20060066937"   "20060067648"   "20060067653"   "20060077127"   "20060077505"   "20060077520"   "20060103613"   "3982239"   "4403248"   "4441791"   "4459182"   "4482213"   "4500171"   "4519676"   "4566935"   "4571603"   "4596992"   "4615595").PN. OR ("4662746"   "4681403"   "4709995"   "4710732"   "4856863"   "4859060"   "4954789"   "4956619"   "4982184"   "5018256"   "5028939"   "5037173"   "5055833"   "5061049"   "5078479"   "5079544"   "5083857"   "5096279"   "5099353"   "5124834"   "5142405"   "5142414"   "5162787"   "5168406"   "5170156"   "5172262"   "5179274"   "5192395"   "5192946"   "5206629"   "5212582"   "5214419"   "5214420"   "5216537"   "5226099"   "5227900"   "5231522"   "5233335"   "5233456"   "5233459"   "5254980"   "5272473"   "5273252"   "5282277"   "5282722"   "5282722"   "5282722"   "5282722"	US-PGPUB; OR USPAT; USOCR	ON	2009/02/25 14:11
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## EAST Search History

L19	2284	345/98.ccls.	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/25 14:12
L20	3564	345/87.ccls.	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/25 14:12
S1	45	((YOSHINORI) near2 (OGAWA)).INV.	US-PGPUB; USPAT	OR	ON	2007/12/18 11:34
S2	36	((SHIGEKI) near2 (TANAKA)).INV.	US-PGPUB; USPAT	OR	ON	2007/12/18 11:34
S3	1973	345/98.ccls.	US-PGPUB; USPAT	OR	ON	2007/12/18 11:34
S4	71954	"345"/\$5.ccls.	US-PGPUB; USPAT	OR	ON	2007/12/18 11:35
S5	39355	scan near1 line	US-PGPUB; USPAT	OR	ON	2007/12/18 11:35
S6	3183	pixel near1 capacitor	US-PGPUB; USPAT	OR	ON	2007/12/18 11:35
S7	33747	common near1 electrode	US-PGPUB; USPAT	OR	ON	2007/12/18 11:35
S8	162523	lcd	US-PGPUB; USPAT	OR	ON	2007/12/18 11:36
S9	4933	twist near1 angle	US-PGPUB; USPAT	OR	ON	2007/12/18 11:36
S10	833359	perpendicular	US-PGPUB; USPAT	OR	ON	2007/12/18 11:36
S11	25005	counter near1 electrode	US-PGPUB; USPAT	OR	ON	2007/12/18 11:36
S12	140068	wider and (view or visual) and angle	US-PGPUB; USPAT	OR	ON	2007/12/18 11:41
S13	1	10/727645	US-PGPUB; USPAT	OR	ON	2007/12/18 11:44
S14	2105075	pixel same1 group	US-PGPUB; USPAT	OR	ON	2007/12/18 11:44
S15	85050	voltage near3 adjust\$4	US-PGPUB; USPAT	OR	ON	2008/07/31 10:02
S16	8666	voltage near3 adjust\$4 and pixel	US-PGPUB; USPAT	OR	ON	2007/12/18 11:44
S17	2336	voltage near3 adjust\$4 and pixel and lcd	US-PGPUB; USPAT	OR	ON	2007/12/18 11:46
S18	1097	S17 and S4	US-PGPUB; USPAT	OR	ON	2007/12/18 11:45
S19	125	S17 and S3	US-PGPUB; USPAT	OR	ON	2007/12/18 11:45
S20	13	S17 and S3 and S6	US-PGPUB; USPAT	OR	ON	2007/12/18 11:45

## EAST Search History

S21	730	voltage near3 adjust\$4 and pixel and lcd and S7	US-PGPUB; USPAT	OR	ON	2007/12/18 11:46
S22	498	voltage near3 adjust\$4 and pixel and lcd and S7 and capacitor	US-PGPUB; USPAT	OR	ON	2007/12/18 11:46
S23	143	voltage near3 adjust\$4 and pixel and lcd and S7 and capacitor and gamma	US-PGPUB; USPAT	OR	ON	2007/12/18 11:49
S24	15	voltage near3 adjust\$4 and pixel and lcd and S7 and capacitor and gamma and (constant near1 current)	US-PGPUB; USPAT	OR	ON	2007/12/18 11:49
S25	14	("5745092"   "5774106"   "6157335"   "6166725"   "6172661").PN. OR ("6437716").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/12/18 11:53
S26	2	"20030156104"	US-PGPUB; USPAT; USOCR	OR	ON	2007/12/18 11:54
S27	8	("5617111"   "5774106"   "5952789"   "6127997"   "6232948"   "6522319"   "6856308").PN. OR ("7068292").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2007/12/18 12:19
S28	1	10/727645	US-PGPUB; USPAT; USOCR	OR	ON	2007/12/18 12:34
S29	2	09/731736	US-PGPUB; USPAT; USOCR	OR	ON	2007/12/18 12:34
S30	0	2001/0003431	US-PGPUB; USPAT	OR	ON	2008/06/30 12:17
S31	1	"20010003431"	US-PGPUB; USPAT	OR	ON	2008/06/30 12:29
S32	1	"7088331"	US-PGPUB; USPAT	OR	ON	2008/06/30 12:40
S33	388	345/103.ccls.	US-PGPUB; USPAT	OR	ON	2008/06/30 12:40
S34	136	345/103.ccls. and (common near2 electrode)	US-PGPUB; USPAT	OR	ON	2008/06/30 12:41
S35	9	345/103.ccls. and (common near2 electrode) same adjust\$4	US-PGPUB; USPAT	OR	ON	2008/06/30 12:44
S36	10	345/103.ccls. and ((common near2 electrode) or vcom) same adjust\$4	US-PGPUB; USPAT	OR	ON	2008/06/30 12:47
S37	5	("20010015716"   "20020005846"   "20030043105"   "20030057857"   "6496172").PN. OR ("7042437").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2008/06/30 12:45
S39	11	345/103.ccls. and ((common near2 (electrode or voltage)) or vcom) same adjust\$4	US-PGPUB; USPAT	OR	ON	2008/06/30 12:49
S40	162	345/103.ccls. and ((common near2 (electrode or voltage)) or vcom)	US-PGPUB; USPAT	OR	ON	2008/06/30 12:54

## EAST Search History

S41	32	345/103.ccls. and ((common near2 (electrode or voltage)) or vcom) same ((odd and even) group)	US-PGPUB; USPAT	OR	ON	2008/06/30 12:57
S42	35	345/103.ccls. and (((common or counter) near2 (electrode or voltage)) or vcom) same ((odd and even) group)	US-PGPUB; USPAT	OR	ON	2008/06/30 13:05
S43	12441	(((common or counter) near2 (electrode or voltage)) or vcom) same ((odd and even) group adjust\$5)	US-PGPUB; USPAT	OR	ON	2008/06/30 13:05
S44	21243	345/5\$5 (((common or counter) near2 (electrode or voltage)) or vcom) near3 ((odd and even) group adjust\$5)	US-PGPUB; USPAT	OR	ON	2008/06/30 13:06
S45	19797	345/5\$5 (((common or counter) near2 (electrode or voltage))near2 adjust\$5)	US-PGPUB; USPAT	OR	ON	2008/06/30 13:06
S46	33	345/5\$5 and (((common or counter) near2 (electrode or voltage))near2 adjust\$5)	US-PGPUB; USPAT	OR	ON	2008/06/30 13:06
S47	280	"345"/\$5.ccls. and (((common or counter) near2 (electrode or voltage))near2 adjust\$5)	US-PGPUB; USPAT	OR	ON	2008/06/30 13:06
S48	6	("20020109655"   "5751267"   "6297791"   "6600465"   "6784863"   "7084849").PN. OR ("7385580").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2008/06/30 13:09
S49	4	("20020135575"   "20020186230"   "6373419"   "6762565").PN. OR ("7307610").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2008/06/30 13:13
S50	1	"11265426"	US-PGPUB; USPAT	OR	ON	2008/06/30 13:35
S51	0	"11265426"10/709849	US-PGPUB; USPAT	OR	ON	2008/06/30 13:35
S52	1	10/709849	US-PGPUB; USPAT	OR	ON	2008/06/30 13:36
S53	1	"20040227895"	US-PGPUB; USPAT	OR	ON	2008/06/30 13:40
S54	6	((("7002594") or ("5386247") or ("6870576")).PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/06/30 14:32
S55	237	(adjust\$4 adj ((common counter) near1 (electrode voltage)))	US-PGPUB; USPAT	OR	ON	2008/06/30 14:33
S56	135	(adjust\$4 adj ((common counter) near1 (electrode voltage))) and "345"/\$5.ccls.	US-PGPUB; USPAT	OR	ON	2008/06/30 14:58
S57	24	("4393380"   "4413256"   "5184118"   "5214417").PN. OR ("5402142").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2008/06/30 14:36

## EAST Search History

S58	23	("4319237"   "4626841"   "4917469"   "5119085"   "5179371"   "5214418"   "5398042").PN. OR ("5748171").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2008/06/30 14:53
S59	3	(adjust\$4 adj ((common counter) near1 (electrode voltage))) same (odd and even)	US-PGPUB; USPAT	OR	ON	2008/06/30 15:01
S60	32	(adjust\$4 adj ((common counter) near1 (electrode voltage))) and (odd and even)	US-PGPUB; USPAT	OR	ON	2008/06/30 15:05
S61	708	((common counter) near1 (electrode voltage)) same (odd and even)	US-PGPUB; USPAT	OR	ON	2008/06/30 15:06
S62	708	((common counter) near1 (electrode voltage)) same (odd and even)	US-PGPUB; USPAT	OR	ON	2008/06/30 15:07
S63	387	((common counter) near1 (electrode voltage)) same (odd and even) and "345"/\$5.ccls.	US-PGPUB; USPAT	OR	ON	2008/06/30 15:07
S64	418	((common counter) near1 (electrode voltage) or vcom) same (odd and even) and "345"/\$5.ccls.	US-PGPUB; USPAT	OR	ON	2008/06/30 15:15
S65	2	10/102453	US-PGPUB; USPAT	OR	ON	2008/06/30 15:16
S66	19	("20020008795"   "20020075249"   "20020149323"   "20020196243"   "20030058208"   "20030117464"   "20030151572"   "20030201447"   "20030222311"   "4952031"   "5392058"   "5430462"   "5706022"   "5748165"   "6078379"   "6091393"   "6300926"   "6489952"   "6628258").PN. OR ("7006064").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2008/06/30 15:16
S67	1	10/986098	US-PGPUB; USPAT	OR	ON	2008/07/01 09:57
S68	1	2004/0061999	US-PGPUB; USPAT	OR	ON	2008/07/01 09:58
S69	2	"20020118168"	US-PGPUB; USPAT	OR	ON	2008/07/01 10:05
S70	0	"10727645"	US-PGPUB; USPAT	OR	ON	2008/07/01 10:05
S71	1	"10/727645"	US-PGPUB; USPAT	OR	ON	2008/07/01 10:05
S72	921	adjust\$4 near3 ((common counter) near2 (electrode voltage))	US-PGPUB; USPAT	OR	ON	2008/07/01 10:29
S73	236	adjust\$4 near3 ((common counter) near2 (electrode voltage)) and "345"/\$5.ccls.	US-PGPUB; USPAT	OR	ON	2008/07/01 10:30
S74	6	("20020109655"   "5751267"   "6297791"   "6600465"   "6784863"   "7084849").PN. OR ("7385580").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2008/07/01 10:42
S75	26	adjustable near1 voltage near2 common	US-PGPUB; USPAT	OR	ON	2008/07/09 08:50



## EAST Search History

S76	46	adjustable near2 voltage near2 common	US-PGPUB; USPAT	OR	ON	2008/07/09 08:50
S77	6	"6181310"	US-PGPUB; USPAT	OR	ON	2008/07/09 09:15
S78	24	("4393380"   "4413256"   "5184118"   "5214417").PN. OR ("5402142").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2008/07/09 09:41
S79	1	10/727645	US-PGPUB; USPAT; USOCR	OR	ON	2008/07/09 09:41
S80	2	09/977912	US-PGPUB; USPAT	OR	ON	2008/07/09 12:02
S81	1	10/727645	US-PGPUB; USPAT	OR	ON	2008/07/09 12:07
S82	798	multi\$1domain near3 liquid near2 crystal	US-PGPUB; USPAT	OR	ON	2008/07/09 12:09
S83	3	multi\$1domain near3 liquid near2 crystal and (adjustable near3 common)	US-PGPUB; USPAT	OR	ON	2008/07/09 12:18
S84	0	"10727645"	US-PGPUB; USPAT	OR	ON	2008/07/09 12:18
S85	1	"10/727645"	US-PGPUB; USPAT	OR	ON	2008/07/09 12:18
S86	1	"7015980"	US-PGPUB; USPAT	OR	ON	2008/07/09 14:04
S87	4	"7105980"	US-PGPUB; USPAT	OR	ON	2008/07/09 14:05
S88	1	"7015980"	US-PGPUB; USPAT	OR	ON	2008/07/09 14:05
S89	2	"7015890"	US-PGPUB; USPAT	OR	ON	2008/07/09 14:06
S90	50	"5867140"	US-PGPUB; USPAT	OR	ON	2008/07/22 15:29
S91	2	("5867140").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/07/22 15:31
S92	2	("6809711").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/07/22 15:31

## EAST Search History

S93	2	("11157627").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2008/07/31 10:02
S94	0	"11157627"	US-PGPUB; USPAT	OR	ON	2008/07/31 10:02
S95	1	"11/157627"	US-PGPUB; USPAT	OR	ON	2008/07/31 10:03
S96	22	"5402142"	US-PGPUB; USPAT	OR	ON	2008/08/03 12:16
S97	0	05-210121	US-PGPUB; USPAT	OR	ON	2008/08/03 12:16
S98	0	05-210121	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/08/03 12:16
S99	3	"05210121"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2008/08/03 12:16
S10 0	1	"20020063669"	US-PGPUB; USPAT	OR	ON	2008/08/03 13:34
S10 2	560	viewing same angle same lcd same wid\$4 and "345"/\$5.ccls.	US-PGPUB; USPAT	OR	ON	2008/08/03 13:35
S10 3	68	viewing same angle same lcd same wid\$4 and "345"/\$5.ccls. and vcom	US-PGPUB; USPAT	OR	ON	2008/08/03 13:38
S10 4	18	"5686932"	US-PGPUB; USPAT	OR	ON	2008/08/03 14:19
S10 5	0	"2001003431"	US-PGPUB; USPAT	OR	ON	2008/08/03 14:19
S10 6	1	"20010003431"	US-PGPUB; USPAT	OR	ON	2008/08/03 14:19